

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Palmieri et al.	Docket No.:	2006P26237 US
Application No.:	10/813,604	Examiner:	WRIGHT
Filed:	3/31/2004	Art Unit:	1797
Customer No.:	26474	Confirmation No.:	4357

For: Multipath access system for use in an automated immunoassay analyzer

Honorable Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Sir:

This is an appeal from the final rejection mailed June 04, 2008. A Notice of Appeal was filed on September 04, 2008. It is respectfully requested that a two-month extension of time be granted in this case. The respective \$460.00 fee is paid by credit card. The fee of \$510.00 set forth in 37 C.F.R. § 41.20(b)(2) is paid by credit card. Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees, to Deposit Account 14.1437. Please credit any excess fees to such account.

REAL PARTY IN INTEREST:

The real party in interest is Siemens Healthcare Diagnostics Inc., of Deerfield, Illinois.

RELATED APPEALS AND INTERFERENCES:

To the best of the undersigned's knowledge, there are no related interferences or judicial proceedings.

STATUS OF CLAIMS:

- Claims 27 – 47 are pending in the application.
- Claims 27 – 38 are rejected.
- Claims 27 – 38 are the subject of this appeal.
- Claims 39 – 47 have been withdrawn from consideration.
- No claims are allowed or confirmed.
- No claims are objected to.
- Claims 1 – 26 are canceled.

STATUS OF AMENDMENT:

An amendment to the claims was filed in reply to the final Office action mailed June 04, 2008. The amendment was entered.

SUMMARY OF CLAIMED SUBJECT MATTER:

Independent claim 27 is directed to a multipath access system for use in an automated immunoassay analyzer¹, comprising: (a) a transport device,² (b) a transfer

¹ Specification page 2, lines 10 – 15.

² Specification page 3, lines 13 – 14.

station,³ and (c) a programmable controller.⁴ The transport device comprises (i) means for holding a plurality of vessels,⁵ and (ii) means for moving the vessel holding means in a continuous loop.⁶ The transfer station comprises a means for moving vessels to and from the vessel holding means.⁷ The programmable controller is programmed to determine an individual path along the continuous loop for each of the vessels.⁸ The determination of each path is based on a resource requirement associated with each vessel.⁹

Claim 28 is directed to the multipath access system of claim 27, wherein the resource requirement associated with each vessel includes one or more tests, operations, and/or assays to be performed in each vessel.¹⁰

Claim 29 is directed to the multipath access system of claim 27, wherein the programmable controller is programmed to receive information regarding the resource requirement associated with each vessel, and wherein the paths determined by the controller do not depend on the order in which the controller receives the information.¹¹

Claim 30 is directed to the multipath access system of claim 27, wherein the path determined for at least one vessel, requires the transfer station to move at least one vessel to or from the vessel holding means.¹²

Claim 31 is directed to the multipath access system of claim 27, further comprising a second transport device.¹³ The second transport device comprises second

³ Specification page 3, lines 17 – 19.

⁴ Specification page 3, lines 19 – 23.

⁵ Specification page 3, lines 13 – 14; FIG. 2 illustrates Vessel Holding Member 207; and FIGs. 7 and 8, illustrating embodiments having multiple transport devices each comprising means for holding a plurality of vessels.

⁶ Specification page 3, lines 13 – 16, FIG. 2 illustrates Incubator Belt 202, and FIGs. 7 and 8 illustrate embodiments having multiple transport devices each comprising means for holding a plurality of vessels, and Incubator Chains 802. At page 14, lines 4 – 14, the specification discusses various incubator belt arrangements.

⁷ Specification page 5, lines 18 – 23; page 9, lines 9 – 11; 20A and 20B in FIG. 2, page 10, line 5 – page 11, line 16. FIGs. 3A, 3B, 3C, 3D, 4A, 4B, 4C, and 4D also illustrate means for moving vessels to and from the vessel holding means.

⁸ Specification page 2, line 24 – page 3, line 2.

⁹ Specification page 2, line 24 – page 3, line 2.

¹⁰ Specification page 11, lines 21 – 26.

¹¹ Specification page 2, line 24 – page 3, line 2; and specification page 11, lines 21 – 26.

¹² Specification page 13, lines 5 – 19.

¹³ Specification page 2, lines 13 – 15.

means for holding a plurality of vessels,¹⁴ and second means for moving the vessel holding means in a continuous loop.¹⁵ Claim 31 also requires the transfer station to comprise a means for moving vessels (i) from the vessel holding means of the first transport device to the vessel holding means of the second transport device, and (ii) from the vessel holding means of the second transport device to the vessel holding means of the first transport device.¹⁶

Claim 32 is directed to the multipath access system of claim 27, further comprising a delivery station for delivering one or more vessels to the transport device.¹⁷

Claim 33 is directed to the multipath access system of claim 27, further comprising a pipetting station for adding one or more reagents to a vessel positioned in a vessel holding means.¹⁸

Claim 34, is directed to the multipath access system of claim 27, further comprising a wash station for washing vessels.¹⁹

Claim 35 is directed to the multipath access system of claim 34, wherein the wash station is combined with the transfer station.²⁰

Claim 36 is directed to the multipath access system of claim 27, further comprising an agitating assembly positioned adjacent to the transport device at a location where at least one test vessel held in a vessel holding means contacts the agitating assembly.²¹

Claim 37 is directed to the multipath access system of claim 36, wherein the agitating assembly is stationary.²²

Claim 38, is directed to the multipath access system of claim 27, wherein the

¹⁴ Specification page 3, lines 13 – 14; FIG. 2 illustrates Vessel Holding Member 207, and FIGs. 7 and 8, illustrating embodiments having multiple transport devices each comprising means for holding a plurality of vessels.

¹⁵ Specification page 3, lines 13 – 16, FIG. 2 illustrates Incubator Belt 202; and FIGs. 7 and 8 illustrate embodiments having multiple transport devices each comprising means for holding a plurality of vessels, and Incubator Chains 802. At page 14, lines 4 – 14, the specification discusses various incubator belt arrangements.

¹⁶ Specification page 5, lines 18 – 23; page 4, lines 11 – 13; page 4, line 14 – page 5, line 5; page 9, lines 9 – 11; 20A and 20B in FIG. 2; page 10, line 5 – page 11, line 16. FIGs. 3A, 3B, 3C, 3D, 4A, 4B, 4C, and 4D also illustrate means for moving vessels to and from the vessel holding means.

¹⁷ Specification page 3, line 16.

¹⁸ Specification page 3, lines 23 – 25.

¹⁹ Specification page 3, lines 25 – 27.

²⁰ Specification page 3, lines 27 – 28.

²¹ Specification page 4, lines 8 – 13.

²² Specification page 4, line 11.

means for moving the vessel holding means is adapted to move the vessels clockwise and/or counterclockwise around the continuous loop.²³

GROUND OF REJECTION TO BE REVIEWED ON APPEAL:

Whether the Office action erred in rejecting:

- I. claims 27 – 38 under 35 U.S.C §112, second paragraph; and
- II. claims 27 – 38 under 35 U.S.C §102(b) over US 5,885,529 to Babson et al.
(hereinafter, “Babson”).

ARGUMENT:

Regarding Rejection I:

Appellants respectfully submit that the rejection of claims 27 – 38 under 35 U.S.C §112, second paragraph is in error.

35 U.S.C. 112, sixth paragraph states that a claim limitation expressed in means-plus-function language “shall be construed to cover the corresponding structure described in the specification and equivalents thereof.” “The disclosure of the structure may be implicit or inherent in the specification, if it would have been clear to those skilled in the art what structure corresponds to the means-plus-function claim limitation.” MPEP §2181, citing, *Atmel Corp. v. Information Storage Devices, Inc.*, 198 F.3d 1374, 1380, 53 USPQ2d 1225, 1229 (Fed. Cir. 1999).

The specification provides support for a transport device comprising “means for holding a plurality of vessels” as recited in claim 27. Similarly, the specification provides support for a second transport device comprising “second means for holding a plurality of vessels” as recited in claim 31. Since the term “vessel holding means” is simply an alternate expression for “means for holding a plurality of vessels,” the specification also provides support for “vessel holding means” as recited in claims 27 and

²³ Specification page 12, lines 13 – 14.

31. For example, on page 3, lines 13 – 14, the specification explains, “[t]he multipath incubator includes a) a transport device (e.g. an incubator belt) having a plurality of vessel holding members” Figure 2 also illustrates “Vessel Holding Members 207.” Figures 7 and 8 illustrate embodiments of the invention having multiple transport devices each comprising means for holding a plurality of vessels.

The specification provides support for a transport device comprising “means for moving the vessel holding means in a continuous loop” as recited in claim 27, and in claim 38, which depends from claim 27. Similarly, the specification provides support for a second transport device comprising “second means for moving the vessel holding means in a continuous loop” as recited in claim 31. For example, on page 3, lines 13 – 16, the specification explains, “[t]he multipath incubator includes a) a transport device (e.g. an incubator belt) having a plurality of vessel holding members where the transport device moves the plurality of vessels along one or more continuous loops” Figure 2 illustrates “Vessel Holding Members 207,” and “Incubator Belt 202.” Figures 7 and 8 illustrate embodiments of the invention having multiple transport devices each comprising means for holding a plurality of vessels, and “Incubator chains 802.” Various embodiments of incubator belt arrangements are discussed in the specification. *See*, page 14, lines 4 – 14, for example.

The specification provides support for a transfer station comprising “a means for moving vessels to and from the vessel holding means” as recited in claim 27. Similarly, the specification provides support for a transfer station comprising “a means for moving vessels (i) from the vessel holding means of the first transport device to the vessel holding means of the second transport device, and (ii) from the vessel holding means of the second transport device to the vessel holding means of the first transport device” as recited in claim 31. For example, on page 5, lines 18 – 23, the specification explains, “[i]n one embodiment, the removing or replacing step is achieved using a transfer station which includes a transfer slide that moves perpendicular to a portion of a path traveled by the transport device, the transfer slide having one or more projecting members which contact a vessel and move the vessel while the transfer slide is moved.” On page 9, lines 9 – 11, the specification further explains, “movement of the test vessel into and out of the station is preferably accomplished by means of a transfer slide, depicted schematically as

20A and 20B in FIG. 2.” The specification also describes a means for moving vessels to and from the vessel holding means on page 10, line 5 – page 11, line 16. Finally, Figures 3A, 3B, 3C, 3D, 4A, 4B, 4C, and 4D illustrate means for moving vessels to and from the vessel holding means.

The specification provides support for a delivery station comprising “means for delivering one or more vessels to the transport device” as recited in claim 32. For example, on page 3, lines 13 – 17, the specification explains, “[t]he multipath incubator includes ... b) at least one delivery station for adding a vessel to the transport device at a specified vessel holding member of the plurality of vessel holding members....” Vessel Delivery Stations are also illustrated in Figures 2, 7, 8 and 9.

Appellants respectfully submit that the specification makes clear to those skilled in the art what structures correspond to the means-plus-function claim limitations.

Regarding Rejection II:

Appellants respectfully submit that the rejection of claims 27 – 38 under 35 U.S.C §102(b) over Babson is in error.

A destination does not anticipate a path. At best, Babson determines a destination for each of a plurality of samples. However, appellants respectfully submit that Babson does not disclose a multipath access system for use in an automated immunoassay analyzer, comprising a programmable controller, programmed to determine an individual path along a continuous loop for each of a plurality of vessels, where each vessel has a resource requirement, and where the determination of each path is based on the resource requirement associated with each vessel.

The computer control utilized in Babson does not determine an individual path along a continuous loop for each sample. The computer control of Babson merely “allows the operator to pick the tests desired for each sample, and, if desired, to prioritize the sample if stat or unstable.”²⁴ Otherwise, Babson assays samples “methodically in sequence around the carousel....”²⁵ Thus, an individual path along a continuous loop is not determined for each sample.

²⁴ Column 10, lines 17 – 19 *Babson et al.* (US 5,885,529).

²⁵ Column 11, line 33 of *Babson et al.* (US 5,885,529).

On page 13, line 20, the Office action asserts, “[c]learly, Babson does not subject the samples to the same path.” However, appellants respectfully submit that this assertion is irrelevant. Babson does not anticipate a programmable controller, programmed to determine an individual path along a continuous loop for each of a plurality of vessels.

Furthermore, on page 13, lines 9 – 10, the Office action alleges, “the controller determines the individual paths for each sample, based on the test desired for each sample.” To the contrary, an individual path along a continuous loop is not determined for each sample in Babson. As stated at column 8, lines 4 – 9 of Babson,

If additional incubation is desired for a sample, chain 213b is used to circle the reaction tube back to the beginning of the serpentine channel 213. On the other hand, if the reaction tube needs to be advanced to wash and photometric analysis, the reaction tubes are shuttled out of the tube processor 213 and are picked up by a circular chain and moved to a high speed spin wash station 214.

First, this portion of Babson does not describe a continuous loop. Chain 213b is required to circle the reaction tube back to the beginning of the serpentine channel 213’. Second, as already discussed above, this portion of Babson does not describe determining an individual path for each sample. If a special request is made for a particular sample, then Babson determines a unique path for that sample. Otherwise, Babson assays samples “methodically in sequence around the carousel....”²⁶

Anticipation can only be established by a single prior art reference, which discloses each and every element of the claimed invention.²⁷ “The identical invention must be shown in as complete detail as is contained in the patent claim.”²⁸ Babson does not anticipate the claimed invention, because Babson does not disclose a multipath access system for use in an automated immunoassay analyzer, comprising a programmable controller, programmed to determine an individual path along a continuous loop for each of a plurality of vessels, where each vessel has a resource requirement, and where the determination of each path is based on the resource requirement associated with each

²⁶ Column 11, line 33 of *Babson et al.* (US 5,885,529).

²⁷ See, *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444 (Fed. Cir. 1984).

²⁸ *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989).

vessel.

Appellants respectfully submit that claim 35 further distinguishes over Babson by requiring that the multipath access system of claim 27 further comprise a wash station for washing vessels, wherein the wash station is combined with the transfer station.

Appellants respectfully submit that claim 38 further distinguishes over Babson by requiring the means for moving the vessel holding means to be adapted to move the vessels clockwise and/or counterclockwise around the continuous loop.

In Conclusion:

Appellants respectfully submit the present application to be in condition for allowance, and request that all grounds of rejection be reversed.

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CLAIMS APPENDIX:

27. (previously presented) A multipath access system for use in an automated immunoassay analyzer, comprising:
- (a) a transport device, comprising
 - (i) means for holding a plurality of vessels, and
 - (ii) means for moving the vessel holding means in a continuous loop,
 - (b) a transfer station, comprising a means for moving vessels to and from the vessel holding means,
 - (c) a programmable controller, programmed to determine an individual path along the continuous loop for each of the vessels,
- wherein the determination of each path is based on a resource requirement associated with each vessel.
28. (previously presented) The multipath access system of claim 27, wherein the resource requirement associated with each vessel includes one or more tests, operations, and/or assays to be performed in each vessel.
29. (previously presented) The multipath access system of claim 27, wherein the programmable controller is programmed to receive information regarding the resource requirement associated with each vessel, and wherein the paths determined by the controller do not depend on the order in which the controller receives the information.
30. (previously presented) The multipath access system of claim 27, wherein the path determined for at least one vessel, requires the transfer station to move at least one vessel to or from the vessel holding means.
31. (previously presented) The multipath access system of claim 27, further comprising a second transport device comprising second means for holding a plurality of vessels, and second means for moving the vessel holding means in a

continuous loop, and

wherein the transfer station comprises a means for moving vessels

- (i) from the vessel holding means of the first transport device to the vessel holding means of the second transport device, and
- (ii) from the vessel holding means of the second transport device to the vessel holding means of the first transport device.

- 32. (previously presented) The multipath access system of claim 27, further comprising a delivery station for delivering one or more vessels to the transport device.
- 33. (previously presented) The multipath access system of claim 27, further comprising a pipetting station for adding one or more reagents to a vessel positioned in a vessel holding means.
- 34. (previously presented) The multipath access system of claim 27, further comprising a wash station for washing vessels.
- 35. (previously presented) The multipath access system of claim 34, wherein the wash station is combined with the transfer station.
- 36. (previously presented) The multipath access system of claim 27, further comprising an agitating assembly positioned adjacent to the transport device at a location where at least one test vessel held in a vessel holding means contacts the agitating assembly.
- 37. (previously presented) The multipath access system of claim 36, wherein the agitating assembly is stationary.
- 38. (previously presented) The multipath access system of claim 27, wherein the means for moving the vessel holding means is adapted to move the vessels

clockwise and/or counterclockwise around the continuous loop.

EVIDENCE APPENDIX:

None.

RELATED PROCEEDINGS APPENDIX:

None.